

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed January 31, 2007. Applicant respectfully requests reconsideration and favorable action in this case.

Claim Status

Claims 1-3, 6-9, 12-16, 19-24, 41-45 and 48 were pending and rejected. To expedite prosecution, Claims 4-5, 10-11, 17-18, 25-40, 46-47, and 49-64 have been cancelled and Claims 1-3, 6-9, 12-13, 16, 19-20, 23-24, and 41 are amended herein. Support for the amendment can be found in the specification as originally filed, particularly paragraphs 22-31. No new matter is introduced. No claim is newly added. By this Amendment, Claims 1-3, 6-9, 12-16, 19-24, 41-45 and 48 remain pending.

Interview Summary

Pursuant to Applicant Initiated Interview Request submitted February 11, 2008, a telephonic interview was conducted on February 19, 2008 between Examiner Baum, Attorney Schuster and Agent Gust. During the interview, differences between embodiments as claimed and the cited prior art were discussed. Possible amendments to the claims were also discussed. The substance of this Amendment is consistent with that which was discussed during the interview. Applicant appreciates the time and effort taken by Examiner Baum to review Applicant's present application and discuss the pending claims and the cited prior art.

Claim Objections

Claim 41 was objected to due to informality. Claim 41 is amended herein to correct the informality. Accordingly, withdrawal of this objection is respectfully requested.

Rejections under 35 U.S.C. § 102

Claims 1-3, 6-9, 12-16, 19-24, 41-45 and 48 were rejected as being anticipated by *An Extensible Microkernel for Application-Specific Operation System Services* ("Bershad"). The rejection is respectfully traversed. Independent Claims 12 and 41 recite limitations similar to those recited in Claim 1. Accordingly, traversal to the rejection will be collectively discussed herein with respect to Claim 1.

In rejecting claim 1, the Examiner states, on pages 3-4 of the Office Action, that Bershad's description "clearly encompasses the claimed limitations as broadly interpreted by the examiner." As discussed during the aforementioned interview, Bershad's description does not anticipate embodiments as claimed in Claim 1 at least because Bershad's description is directed to application-specific kernel components or "spindles" that are dynamically installed at the kernel level. More specifically, according to Bershad, a spindle is a code sequence that is installed dynamically into the operating system kernel by or on behalf of an application and all interaction between the application and the operating system is through these spindles. See Bershad, page 4, §2.1. In this way, a specific spindle can service a particular application at the kernel level. See Bershad, page 5, Figure 1. Prior to installation, these spindles must go through a trusted compiler and code verifier to ensure the integrity of the operating system. *Id.*

By contrast, embodiments as claimed in Claim 1 are directed to a method of supporting a kernel comprising implementing a kernel driver application and a bridge driver at a kernel layer loaded into a main memory of a computer, wherein the kernel driver application is capable of initiating requests and the bridge driver is capable of communicating the requests with at least one user space application residing at a user space. At the kernel layer, the kernel driver application generates a request for processing and sends it to the bridge driver. The bridge driver communicates the request to a user space application at the user space. The request is processed at the user space and a corresponding response is generated and sent back to the bridge driver. In some embodiments, the bridge driver may include a request queue to buffer requests received from the kernel driver application, a response queue to buffer responses received from the user space application, and a bridge manager to establish communication with the user space application and communicate the response to the kernel layer. The kernel driver application and the bridge driver are kernel code implemented at the kernel layer loaded into the main memory. Unlike the spindles described by Bershad, the kernel driver application

and the bridge driver as claimed are not dynamically installed by or on behalf of an application. Moreover, the kernel driver application and the bridge driver as claimed do not service any particular user space applications. On the contrary, in the embodiments as claimed in Claim 1, it is the user space that provides the processing power needed by the kernel driver application.

By leveraging the processing capabilities of the user space, embodiments as claimed can provide many advantages over prior art systems and methods. For example, sophisticated kernels can be implemented with significantly less memory space requirements while being substantially more stable. See Specification, paragraphs 24 and 39.

In view of the foregoing, Applicant respectfully submits that independent Claim 1 and hence dependent claims 2-3 and 6-9, as amended, recite subject matter not reached by Bershad under 35 U.S.C. § 102(b) and therefore should be allowed. For similar reasons, independent Claims 12 and 41 and dependent claims 13-16, 19-24, 42-45 and 48 are also submitted to be patentable over Bershad under 35 U.S.C. § 102(b). Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of Claims 1-2, 7-9, 12, 14-15, 20-24, 41, 42 and 44-45. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

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